

# Post-Construction Peak Flow

Runoff Curve Number and Runoff

Fri Feb 07 15:46:59 2020

Project: WV PP II

By:

Date: 02/07/20

Location:

Checked:

Date:

Developed

## 1. Runoff Curve Number (CN)

Cover description	CN	Soil Group	Area(Acre)
Gravel Streets, Pads and Buildings	89	C	33.500
Grass (Good)	74	C	39.880
Woods (Good)	70	C	0.000

CN (weighted): 80.8

Total Area: 73.380 Acre

## 2. Runoff

Return Period: 1 YEAR

Rainfall, P: 2.48 in

Runoff, Q: 0.9200 in

Runoff Volume: 5.6255 Acre-Ft

Time of Concentration (SCS)

Fri Feb 07 15:50:37 2020

Project: WV PP II

By:

Date: 02/07/20

Location:

Checked:

Date: 02/07/20

Developed

Curve Number : 81

Length of Flow : 5960.00 ft

Average Land Slope : 1.21 %

Time of Concentration : 49.946 hrs, 2996.8 mins

Graphical Peak Discharge

Fri Feb 07 15:56:56 2020

Project: WV PP II

By:

Date: 02/07/20

Location:

Checked:

Date:

Developed

## 1. Data:

Drainage area:.....A = 73.3800Acres

Runoff Curve Number:.....CN = 81

Time of Concentration:.....Tc = 2996.76 min

Storm Type:..... = II

Pond and swamp areas spread  
throughout watershed..... = 3.39 percent of A  
2.4876 Acres

2. Frequency.....yr = 1

3. Rainfall,P(24-hour).....in = 2.48

4. Initial abstraction, Ia..... = 0.4691

5. Compute Ia/P..... = 0.1892

6. Unit peak discharge, qu.....csm/in = 57.325

7. Runoff,Q.....in = 0.9282

8. Pond & swap adjustment factor,...Fp = 0.76

9. Peak Discharge,qp.....cfs = 4.636